

Claim 9

9. A method for obtaining a phage particle comprising an antibody fragment directed against an antigen associated with the surface of target cells in a heterogeneous cell population, wherein said heterogeneous cell population comprises non-target cells and target cells in a heterogeneous mixture, and wherein said non-target cells and/or target cells are detectably labeled, the method comprising:	Memorandum from Dr. Leon Terstappen. (Exhibit B)
(a) providing a library of phage particles that express antibody fragments on the surface of phage particles.	Section I, pages 1-6 and Section II, pages 7-11 of the materials attached to the Terstappen memo. (Exhibit B) Exhibit 1 attached to Logtenberg declaration.
(b) incubating the library of phage particles with said heterogeneous cell population under conditions that allow binding of the antibody fragment expressed on the surface of the phage particles to said antigen associated with said cells.	Section II, page 1 and Section II, pages 7-11 of the materials attached to the Terstappen memo. (Exhibit B) Exhibit 1 attached to Logtenberg declaration.
(c) separating said target cells and phage particles bound therewith from phage particles not bound to said target cells; and	Section II, page 1 and 2 of the materials attached to the Terstappen memo. (Exhibit B) Exhibit 1 attached to Logtenberg declaration.
(d) recovering the phage particles bound to the target cells.	Section II, pages 1, 3-6 of the materials attached to the Terstappen memo. (Exhibit B) Exhibit 1 attached to Logtenberg declaration.

Claim 10

10. A method according to claim 9, wherein the separating of said target cells and phage particles bound therewith from phage particles not bound to said target cells is accomplished by flow cytometry.	Section II, pages 1-11 of the materials attached to the Terstappen memo. (Exhibit B) Page 3 of the deKruif notebook. (Exhibit C)
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Claim 11

11. A method according to claim 9, further comprising isolating antibody fragments that bind to said target cells.	Memorandum from Dr. Terstappen. (Exhibit B) Results of additional experiments performed at BDIS. (Exhibit D)
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Claim 13

13. A method according to claim 9, wherein said detectably labeled cells are labeled with a fluorescent label.	Page 3 of the deKruif notebook. (Exhibit C) Section II, pages 7-11 of materials attached to Tersptappen memo. (Exhibit B)
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Claim 14

14. A method according to claim 13, wherein said fluorescent label is a fluorescein label.	Page 3 of the deKruif notebook. (Exhibit C) Section II, pages 7-11 of materials attached to Tersptappen memo. (Exhibit B)
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Claim 15

15. A method according to Claim 9, further comprising repeating steps (b) through (d).	Section II, pages 5 and 6 of the materials attached to the Terstappen memo. (Exhibit B)
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Claim 16

16. A method according to claim 9, wherein the library of phage particles comprises phage particles expressing Fab or single chain Fv (scFv) antibody fragments.	Section I, pages 4-7 of materials attached to Terstappen memo. (Exhibit B)
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Claim 19

19. A method for obtaining a phage particle comprising an antibody fragment directed against an antigen associated with the surface of target cells, the method comprising:	Memorandum from Dr. Leon Terstappen. (Exhibit B)
(a) providing a library of phage particles that express antibody fragments on the surface of phage particles.	Section I, pages 1-6 and Section II, pages 7-11 of the materials attached to the Terstappen memo. (Exhibit B) Exhibit 1 attached to Logtenberg declaration.
(b) incubating the library of phage particles with non-target antigens.	Section II, page 1 and Section II, pages 7-11 of the materials attached to the Terstappen memo. (Exhibit B) Exhibit 1 attached to Logtenberg declaration.
(c) incubating said library of phage particles with said target cells, under conditions that allow binding of the antibody fragment expressed on the surface of the phage particles to said antigen associated with said target cells.	Section II, page 1 and Section II, pages 7-11 of the materials attached to the Terstappen memo. (Exhibit B) Exhibit 1 attached to Logtenberg declaration.

(d) separating said target cells and phage particles bound therewith from phage particles not bound to said target cells; and	Section II, page 1 and 2 of the materials attached to the Terstappen memo. (Exhibit B) Exhibit 1 attached to Logtenberg declaration.
(e) recovering the phage particles bound to the target cells.	Section II, pages 1, 3-6 of the materials attached to the Terstappen memo. (Exhibit B) Exhibit 1 attached to Logtenberg declaration.

Claim 22

22. A method according to claim 19, wherein the non-target antigens are associated with the surface of non-target cells.	Section II, page 1 and Section II, pages 7-11 of the materials attached to the Terstappen memo. (Exhibit B) Exhibit 1 attached to Logtenberg declaration.
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Claim 23

23. A method according to claim 22, wherein the separating of said target cells and phage particles bound therewith from phage particles not bound by target cells is accomplished by flow cytometry.	Section II, page 1 and Section II, pages 7-11 of the materials attached to the Terstappen memo. (Exhibit B) Exhibit 1 attached to Logtenberg declaration.
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Claim 24

24. A method according to claim 19, further comprising isolating antibody fragments that bind to said target cells..	Memorandum from Dr. Terstappen. (Exhibit B) Results of additional experiments performed at BDIS. (Exhibit D)
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Claim 25

25. A method according to claim 23, wherein said target cells and/or said non-target cells are detectably labeled.	Memorandum from Dr. Leon Terstappen. (Exhibit B))
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Claim 26

26. A method according to claim 25, wherein said detectably labeled cells are labeled with a fluorescent label.	Page 3 of the deKruif notebook. (Exhibit C) Section II, pages 7-11 of materials attached to Tersptappen memo. (Exhibit B)
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Claim 27

27. A method according to claim 26, wherein the fluorochrome-labeled antibodies are phycoerythrin (PE)-labeled, peridinin chlorophyll protein (PerCP)-labeled or fluorescein isothiocyanate (FITC)-labeled.	Page 3 of the deKruif notebook. (Exhibit C) Section II, pages 7-11 of materials attached to Tersappen memo. (Exhibit B)
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Claim 28

28. A method according to claim 19, further comprising repeating steps (b) through (e).	Section II, pages 5 and 6 of the materials attached to the Terstappen memo. (Exhibit B)
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Claim 29

29. A method according to claim 19, wherein the library of phage particles comprises phage particles expressing Fab or single chain Fv (scFv) antibody fragments.	Section I, pages 4-7 of materials attached to Terstappen memo. (Exhibit B)
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